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(FILE 'HOME' ENTERED AT 16:23:13 ON 01 MAY 2001)

FILE 'REGISTRY' ENTERED AT 16:25:42 ON 01 MAY 2001

L1 999 SEA INTERLEUKIN-2
L2 0 SEA IL-2/CN
L3 0 SEA INTERLEUKIN-2/CN
D 999
D L1 999
L4 2 SEA ANTI-CD3
D 1-

FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISALERTS, ADISINSIGHT, BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS, CBNB, CEN, CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, EMBAL, ESBIODBASE, IFIPAT, INVESTEXT, ...' ENTERED AT 16:27:12 ON 01 MAY 2001

L5 14953: SEA (LYMPHOCYTE OR LYMPHOCYTES) AND (IL-2 OR INTERLEUKIN 2 OR L1) AND (ANTI-CD3 OR L4)
L6 1967 SEA L5 AND (VIRAL OR VIRUSES OR VIRUS OR HIV OR (AIDS AND (VIRAL OR VIRUSES OR VIRUS OR HIV)))
L7 495 SEA L6 AND AUTOLOGOUS
L8 312 DUP REM L7 (183 DUPLICATES REMOVED)
L9 312 SEA L8 AND (CD3 OR OTK3) AND (IL-2 OR INTERLEUKIN-2)
D 1-100
D 99 KWIC
D 99 CLM
D 97 KWIC
D 101-200
D 200 KWIC
D 194 KWIC
D 140 KWIC
D 139 KWIC
D 131 KWIC
D 201-312
D 301 KWIC

L11 ANSWER 33 OF 205 ADISALERTS COPYRIGHT 2002 (ADIS)

ACCESSION NUMBER: 1990:41783 ADISALERTS

DOCUMENT NUMBER: 800044085

TITLE: Cytotoxic activity against **HIV**-infected monocytes by recombinant **interleukin-2**-activated natural killer cells
ADIS TITLE: Lymphokine activated killer cells: antimicrobial activity.; Against **HIV**;
Activation induced by **interleukin 2**

AUTHOR: Melder R J; Balachandran R; Rinaldo C R; et al
CORPORATE SOURCE: University of Pittsburgh, Pittsburgh, Pennsylvania, USA; Pittsburgh Cancer Institute, Pittsburgh, Pennsylvania, USA

SOURCE: AIDS Research and Human Retroviruses (Aug 1, 1990), Vol. 6, pp. 1011-1015

DOCUMENT TYPE: (In vitro)

REFERENCE: Antivirals (Summary): Alert no. 11, 1990

FILE SEGMENT: Summary

LANGUAGE: English

WORD COUNT: 317

TEXT:

Purpose:

Natural killer (NK) cells have been shown to aid in the control of ***viral*** infections by killing **virus**-infected cells, including cells infected with **HIV**. This study used a 4-hour sup(51)Cr release assay to investigate the cytotoxic effects of adherent lymphokine activated killer (**LAK**) cells (R&D; nonindustrial source), which had been cultured with **interleukin 2** (R&D; nonindustrial source) for 14 days, on **HIV**-infected and uninfected monocytes. Cold target inhibition of **LAK** cell-induced lysis of **HIV**-infected monocytes by Daudi and K562 tumour cell lines were investigated.

Author comments:

'The results indicated that although killing of the infected monocyte targets may occur 24h after exposure to the **virus**, optimum killing was achieved 3 to 7 days after infection.' The results indicate that the subset of cytotoxic cells that recognise and kill **HIV**-infected target cells are the same as those that kill tumour target cells. Thus, a generalised cytotoxic action of NK cells may occur. The demonstration that **interleukin ***2***** -activated NK cells play a role in the control of **HIV** infection may lead to new therapeutic approaches for the treatment of ***HIV*** infections.

Study details:

Design: in vitro

Drugs: lymphokine activated killer cells, **interleukin 2**

Results table:

Adherent LAK cell cytotoxicity (RU sup(a))		
	HIV -infected monocytes	Non-infected monocytes
Time postinfection		
24 hours	25	6

3 days	41	4
7 days	56	0

a Relative units representing the ratio of lytic units (LU) with monocyte targets to LU with tumour target cells (in which the sensitivity remains constant).

Adherent **LAK** cell preparations were CD56-positive (67-95%), CD16-positive (32-51%) and **CD3**-positive (3-34%) with no CD15-positive cells. 92% of isolated monocytes were CD15-positive.

LAK cell-induced killing of **HIV**-infected monocytes was not MHC-restricted but paralleled the level of cytotoxic activity directed against the tumour target cells. Both **autologous** and allogeneic adherent *****LAK***** cells lysed **HIV**-infected monocytes. Both tumour target cells dose-dependently competed with **HIV**-infected monocytes for lysis by adherent **LAK** cells.

CONTROLLED TERM: Biotechnology; **HIV** infections;
 Interleukin 2, antimicrobial
 activity; Lymphokine activated killer cells,
 antimicrobial activity; Research and development